

DRAWN BY: LPCjr

CHECKED: CH

REVIEWED: DD

APPROVED: BRW

JOB No: 1314

CAD FILE: E2.dwg

DESCRIPTION

REV / DATE

RICO - ARGENTINE MINE SITE
WETLAND DEMONSTRATION

TELEMETRY / NETWORK



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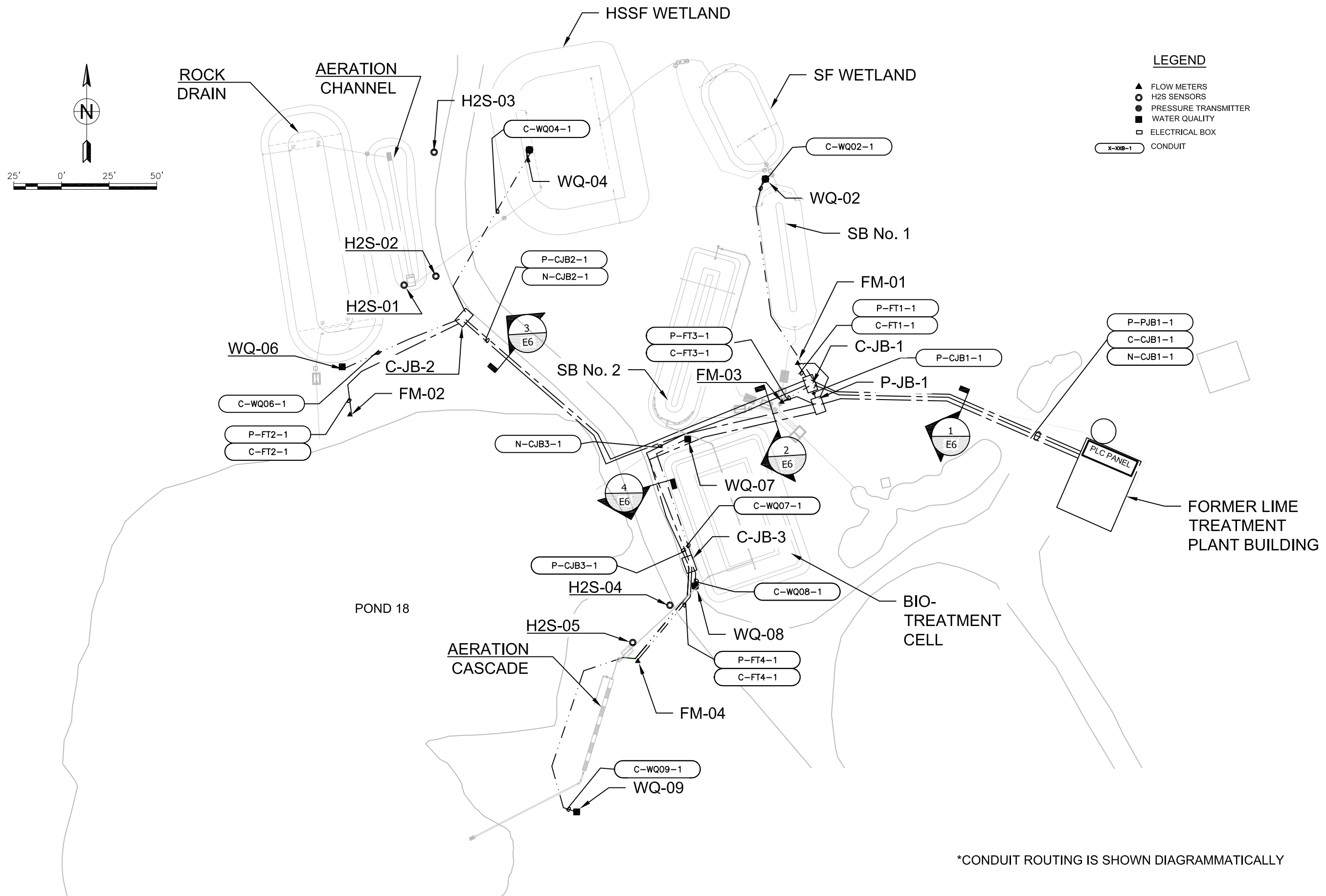
DATE: 20 DEC 2013

SCALE: NTS

SHEET: 02 OF 11

E2

W:\UT\Projects\1314-Rico Mine.sit\2014 Engineering Support\7. Technical\Telametro Desktop\E03.dwg



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APPROVED: BRW
JOB No: 1314
CAD FILE: E3.dwg

DESCRIPTION

REV DATE

RICO - ARGENTINE MINE SITE
WETLAND DEMONSTRATION

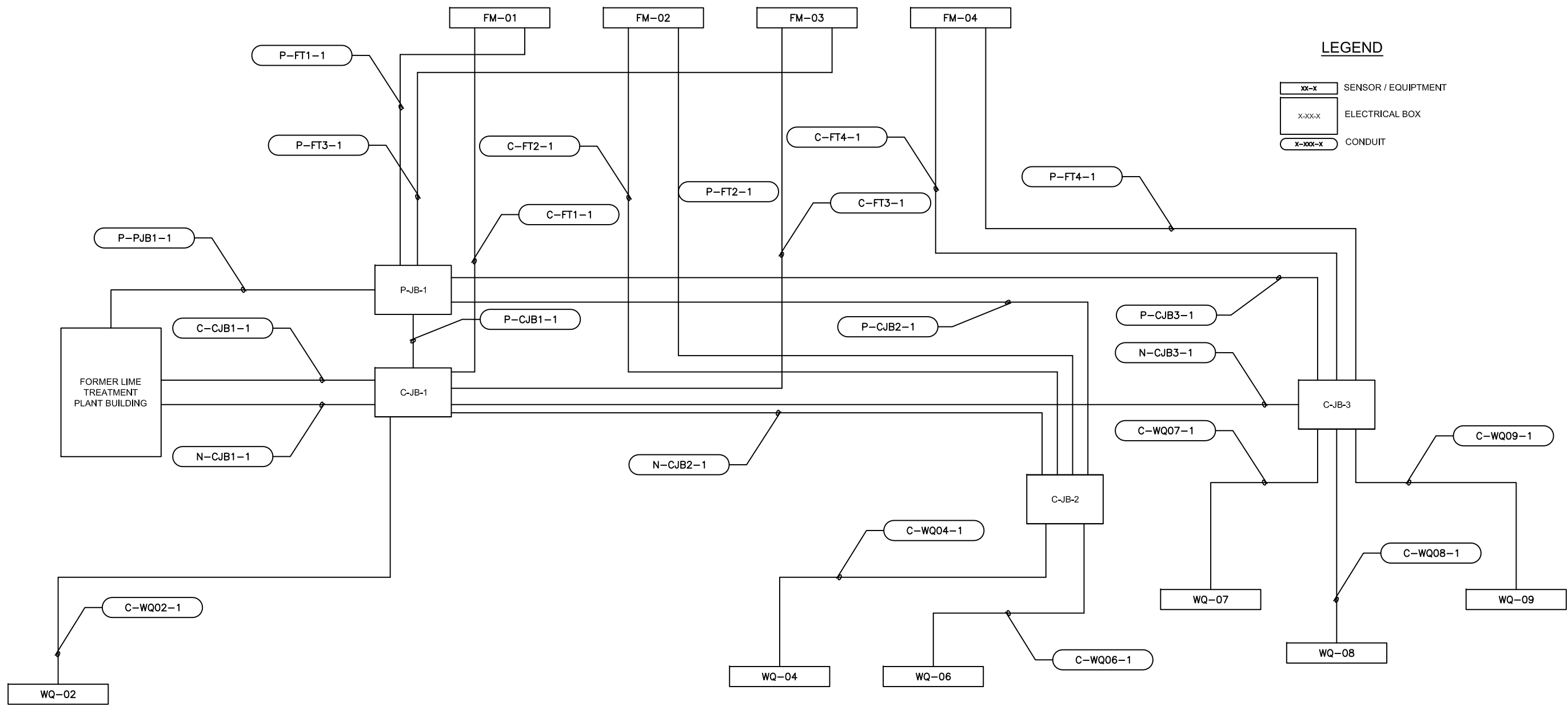
OVERALL CONDUIT

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E3

W:\UT\Projects\1314 Rico Mine site 2014 Engineering Support\7_Technical\Telemetry Design\E4.dwg



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REV	DATE	DESCRIPTION

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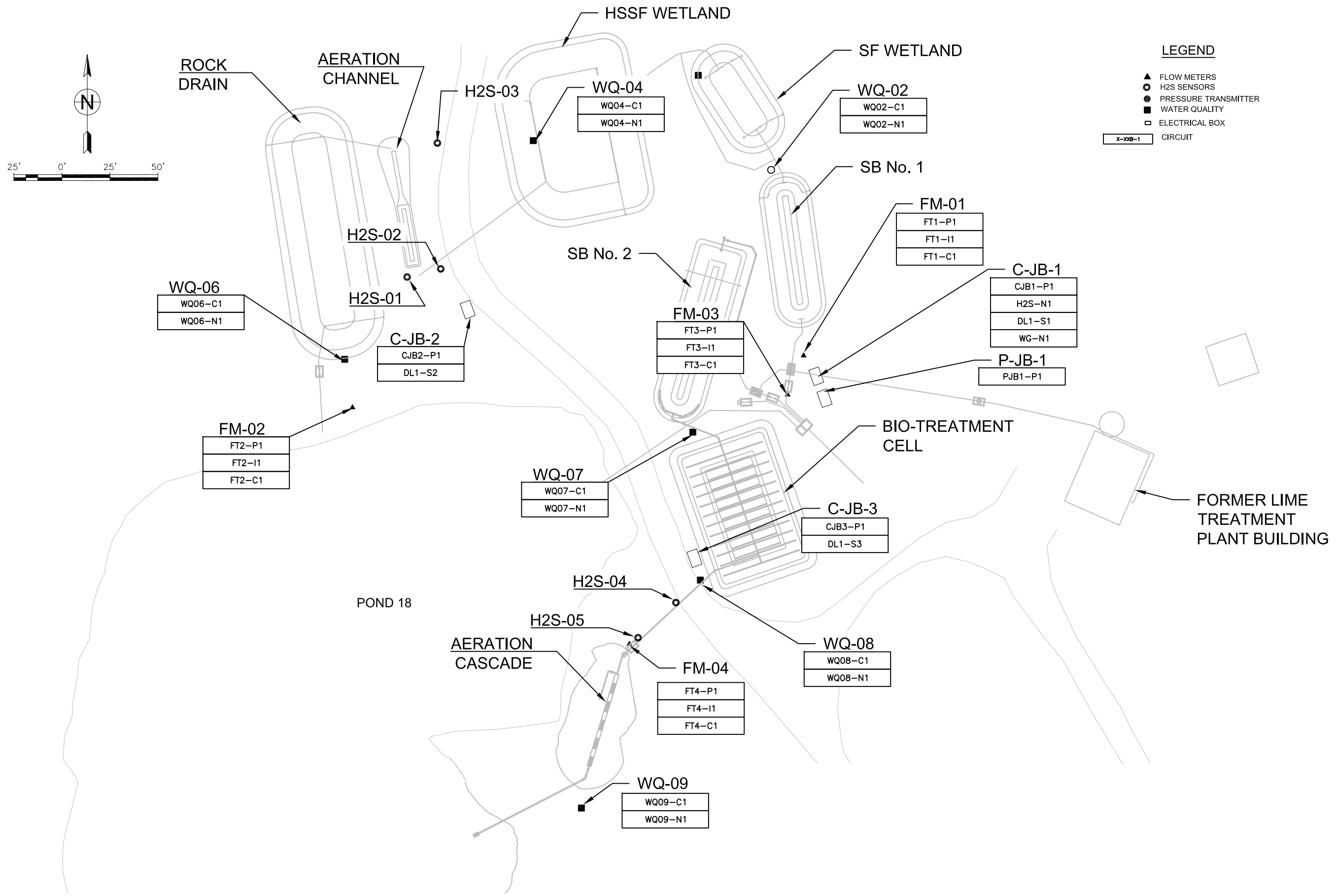
RICO - ARGENTINE MINE SITE WETLAND DEMONSTRATION	CONDUIT BLOCK DIAGRAM
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E4

\\WUT\Projects\1314-Rico Mine.sita 2014 Engineering Support\Y. Technical\Telametro Desktop\E5.dwg



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JOB No:	1314
CAD FILE:	E5.dwg

REV	DATE	DESCRIPTION

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RICO - ARGENTINE MINE SITE WETLAND DEMONSTRATION	CIRCUIT PLAN
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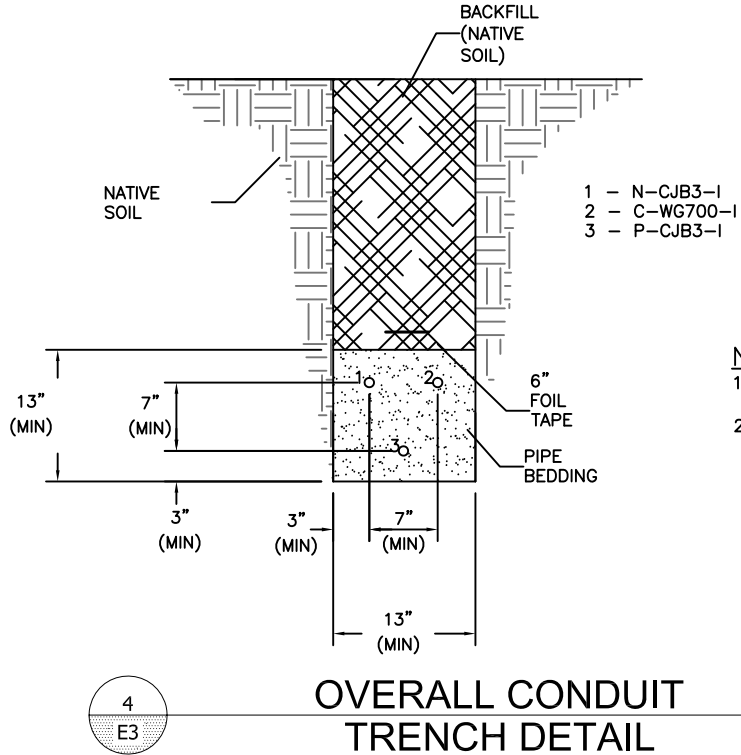
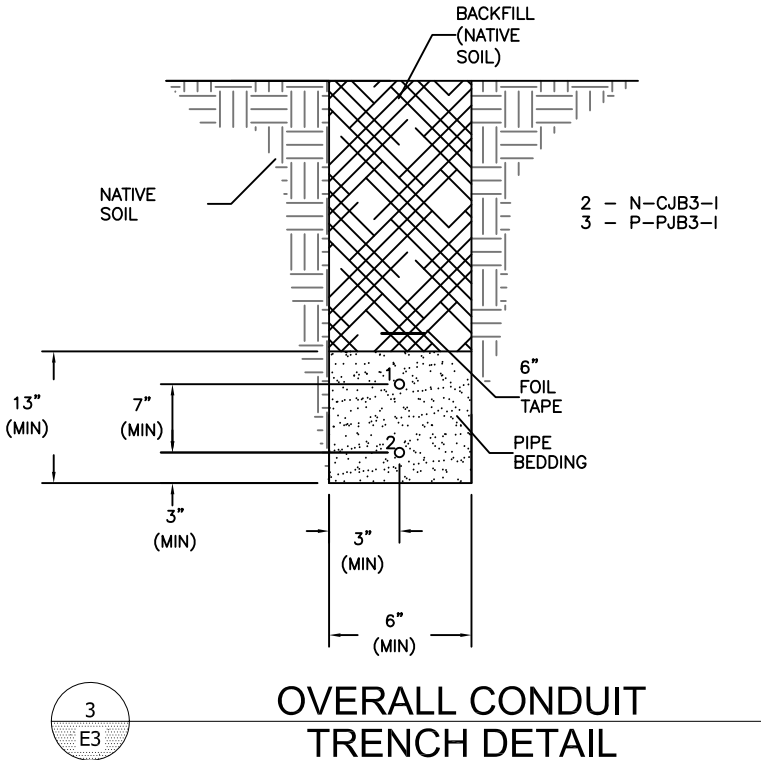
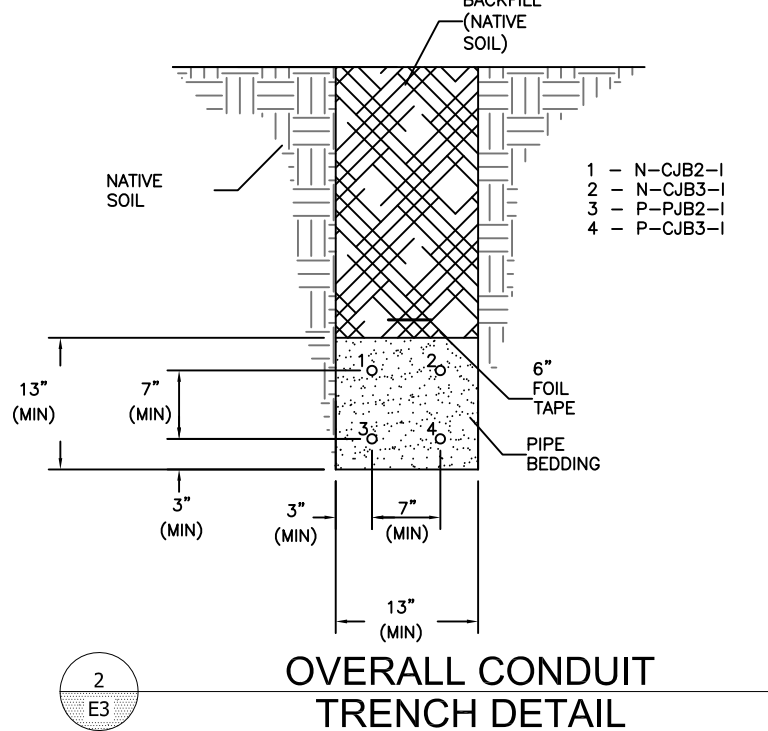
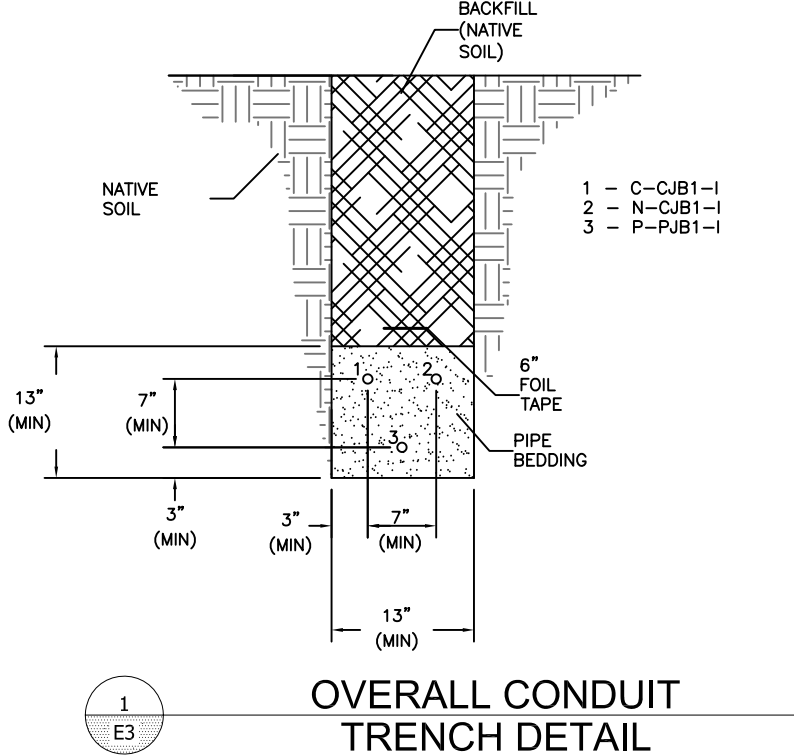


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- NOTES:
1. COMPACTION UNDER ROADWAY SHALL BE 95 PSI EVERYWHERE ELSE SHALL BE 90 PSI.
 2. MINIMUM DEPTH UNDER ROADWAY SHALL BE 36" EVERYWHERE ELSE 30".

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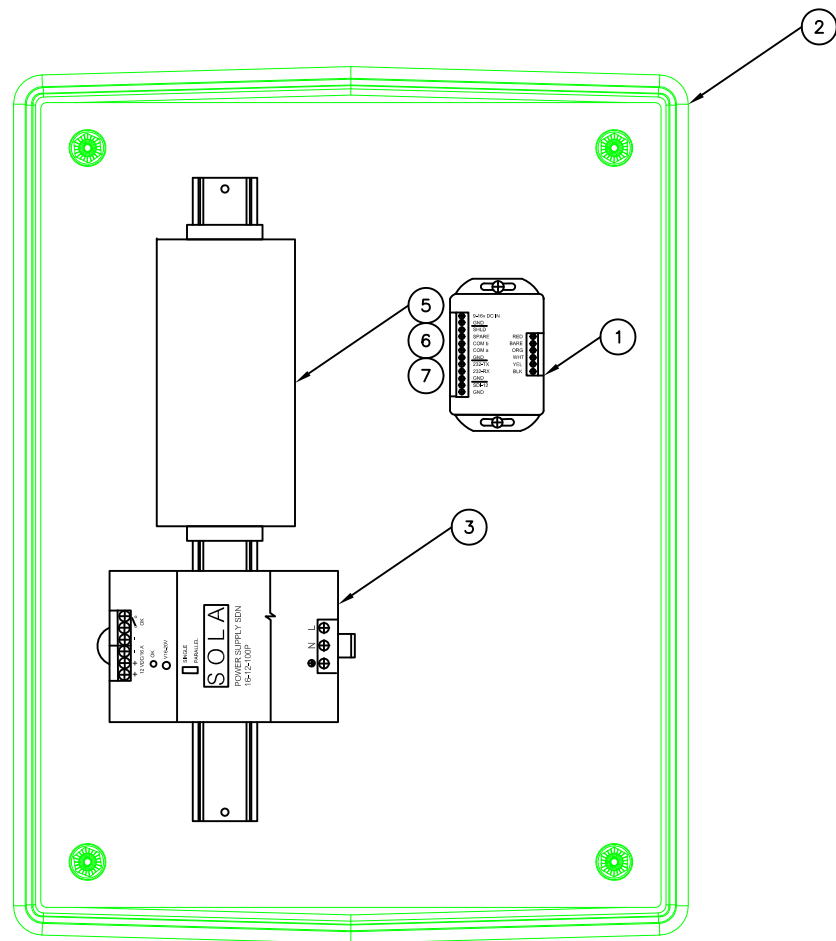
REV	DATE	DESCRIPTION

RICO - ARGENTINE MINE SITE WETLAND DEMONSTRATION	TRENCH DETAIL
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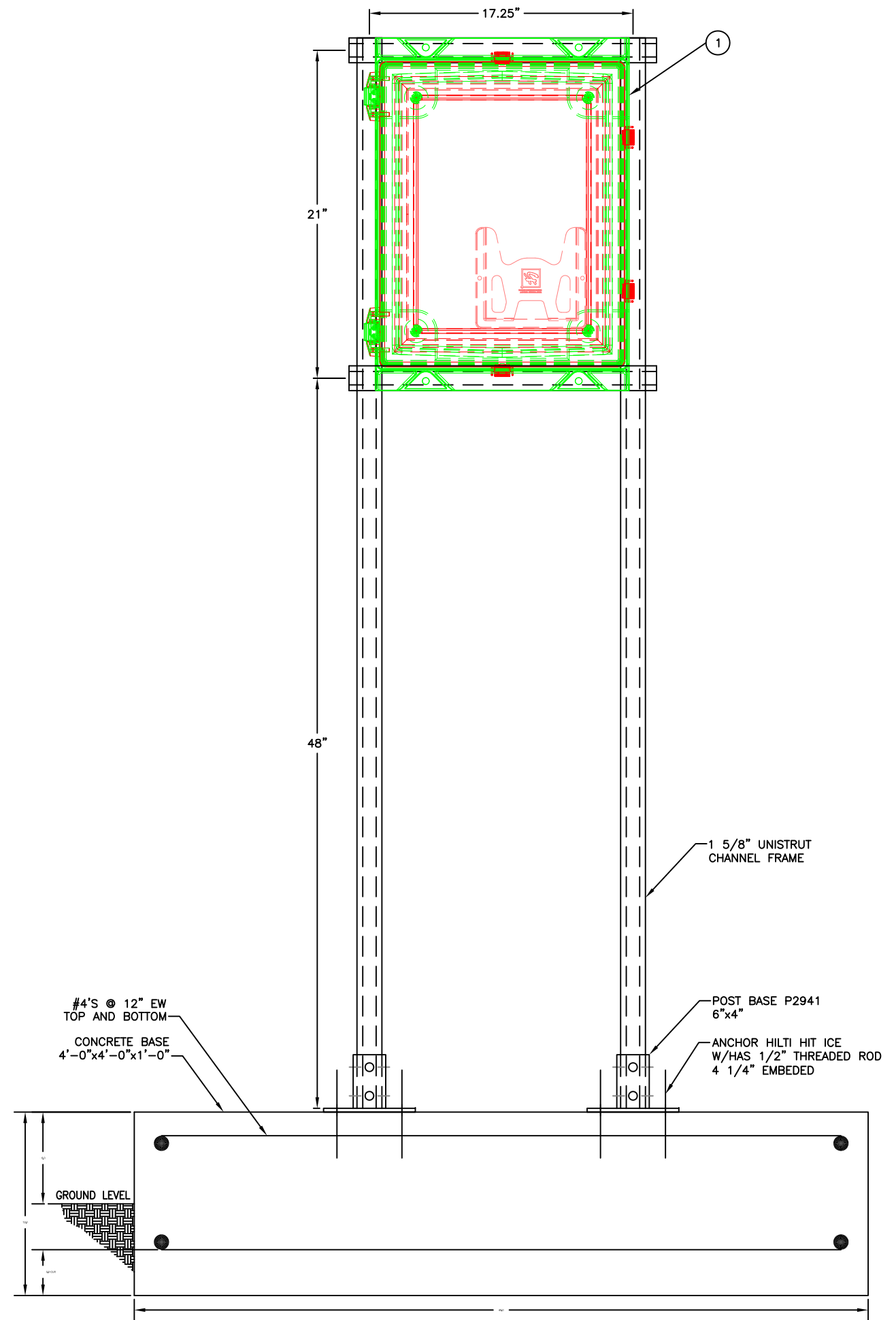
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E6



Bill of Materials				
Item #	Qty	Description	Manufacture	Catalog #
1	1	Enclosure 20.19x16.25x6, NEMA 4x	Hoffman	A20H1606GQRLP
2	1	Panel (for item 1)	Hoffman	A20P16
3	1	Power Supply, 12 VDC, 16A	Sola	SDN 16-12-100P
4	1	Signal Output Adapter	EXO	599800
5	AR	Terminal Block	---	---
6	AR	Fused Terminal Block	---	---
7	AR	Din Rail, 35mm	---	---



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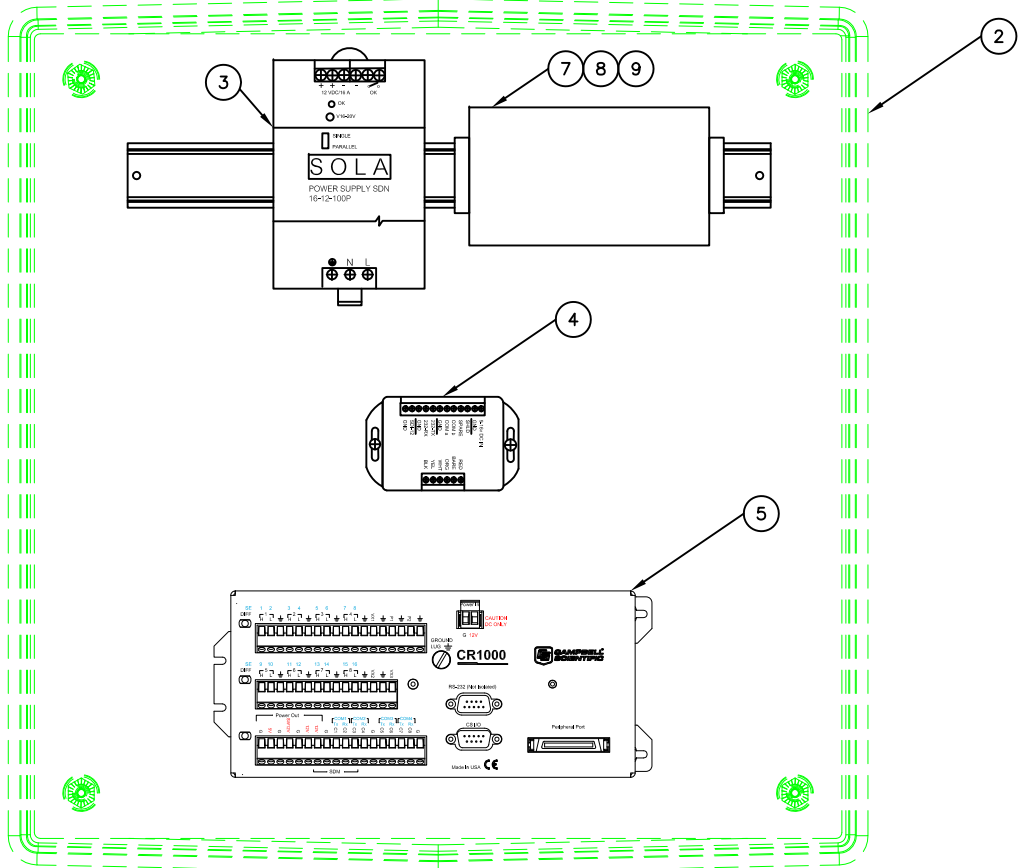
1853

RICO - ARGENTINE MINE SITE WETLAND DEMONSTRATION	BOX DESIGN CJB-2 & CJB-3
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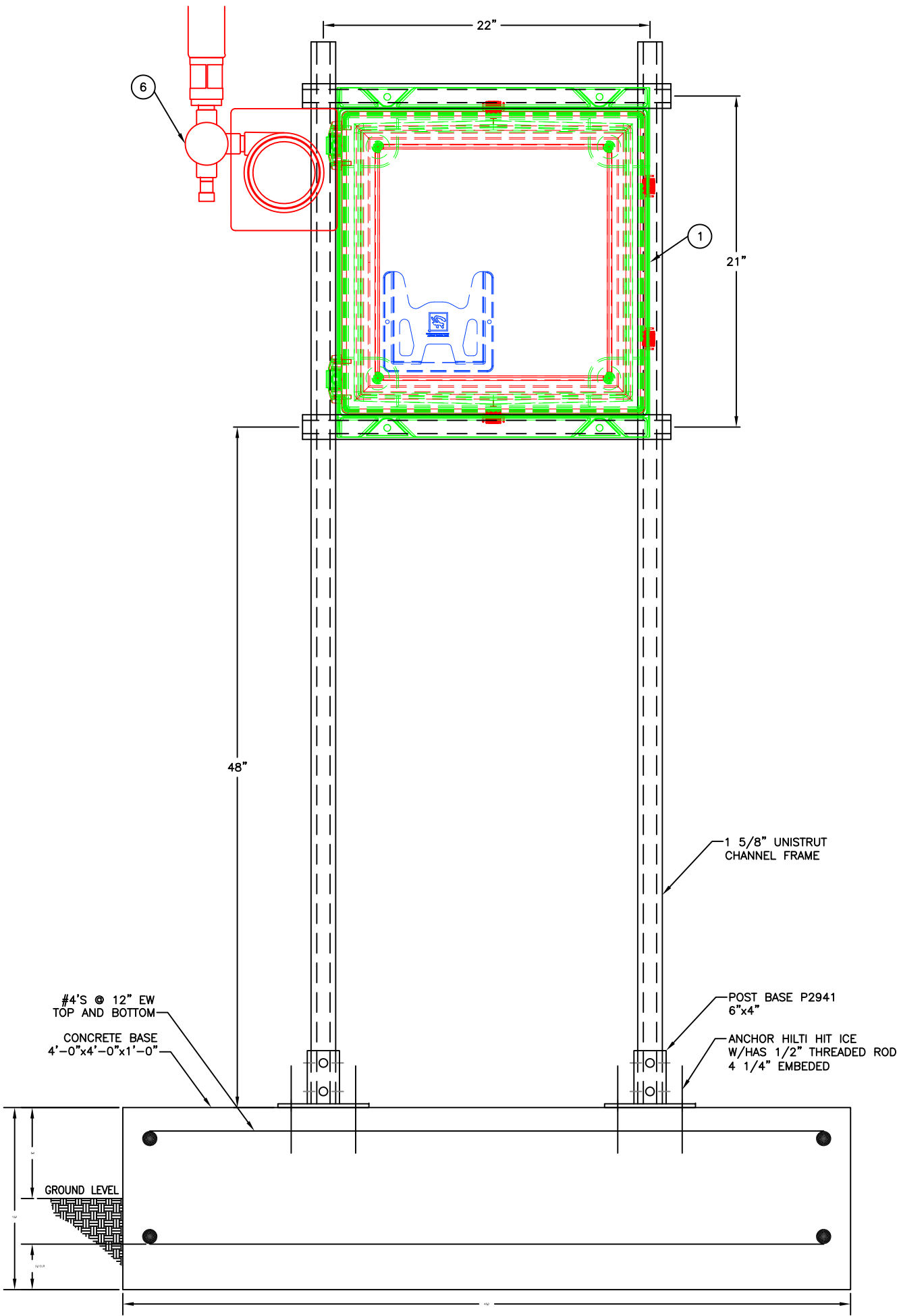
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SCALE:	NTS
SHEET:	07 OF 11

\\AUTC\Projects\1314_Rico_Mine_Site_2014_Engineering_Support\7_Technical\Telermetry_Design\E8.dwg



Bill of Materials				
Item #	Qty	Description	Manufacture	Catalog #
1	1	Enclosure 20.19x20.25x6, NEMA 4x	Hoffman	A20H2006GQRLP
2	1	Panel (for item 1)	Hoffman	A20P20G
3	1	Power Supply, 12 VDC, 16A	Sola	SDN 16-12-100P
4	1	Signal Output Adapter	EXO	599800
5	1	Data Logger	Camble Scientific	CR1000
6	1	Wireless transceiver	Detcon	RXT-320
7	AR	Terminal Block	---	---
8	AR	Fused Terminal Block	---	---
9	AR	Din Rail, 35mm	---	---



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JOB No: 1314
CAD FILE: E8.dwg

DESCRIPTION

REV DATE

RICO - ARGENTINE MINE SITE
WETLAND DEMONSTRATION

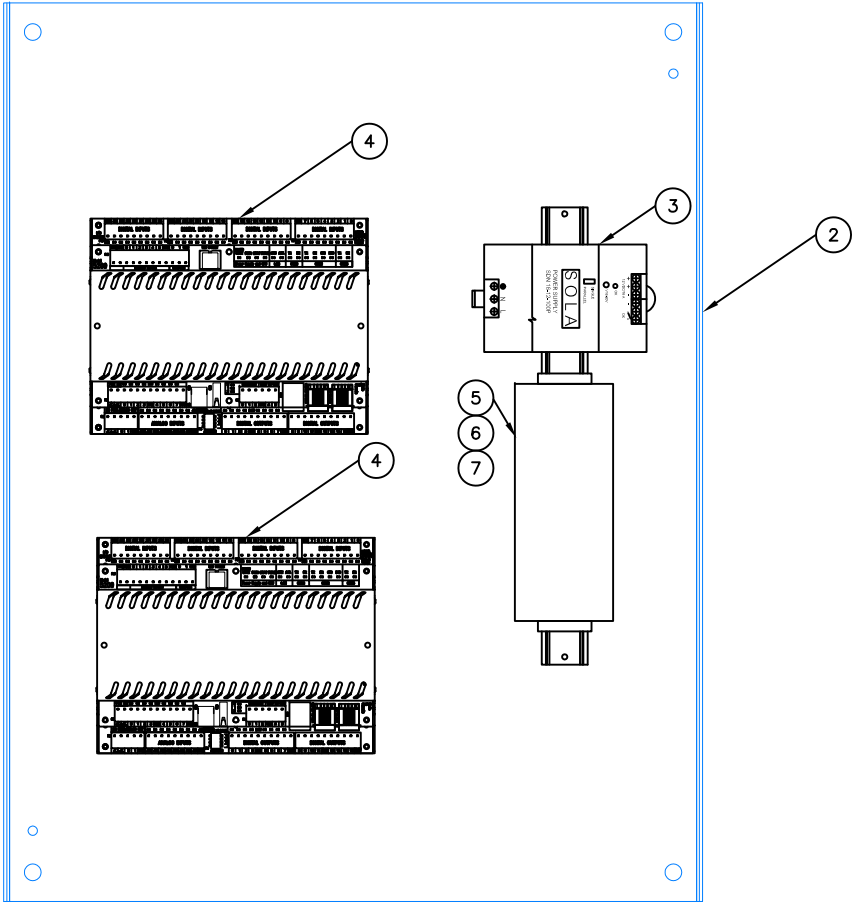
BOX DESIGN CJB-1

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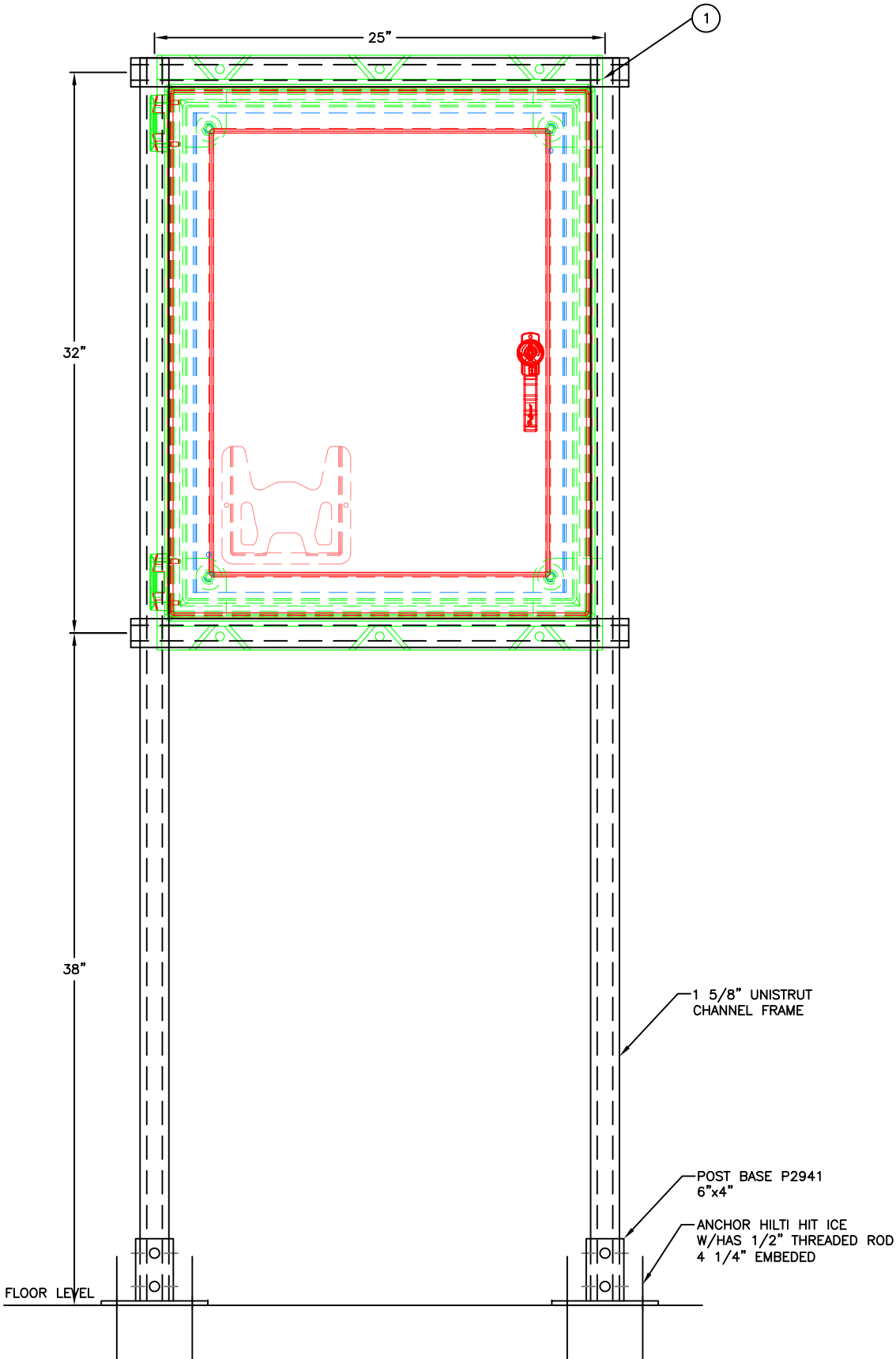
DATE: 20 DEC 2013
SCALE: NTS
SHEET: 08 OF 11

E8

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Bill of Materials				
Item #	Qty	Description	Manufacture	Catalog #
1	1	Enclosure 30.25x24.25x8, NEMA 4x	Hoffman	A30H2408GQRLP3PT
2	1	Panel (for item 1)	Hoffman	A30P24
3	1	Power Supply, 12 VDC, 16A	Sola	SDN 16-12-100P
4	1	SCADAPack 357	SCADAPack	TBUP357-1A20-AB00
5	AR	Terminal Block	---	---
6	AR	Fused Terminal Block	---	---
7	AR	Din Rail, 35mm	---	---



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APPROVED:	BRW
JOB No:	1314
CAD FILE:	E9.dwg

REV	DATE	DESCRIPTION

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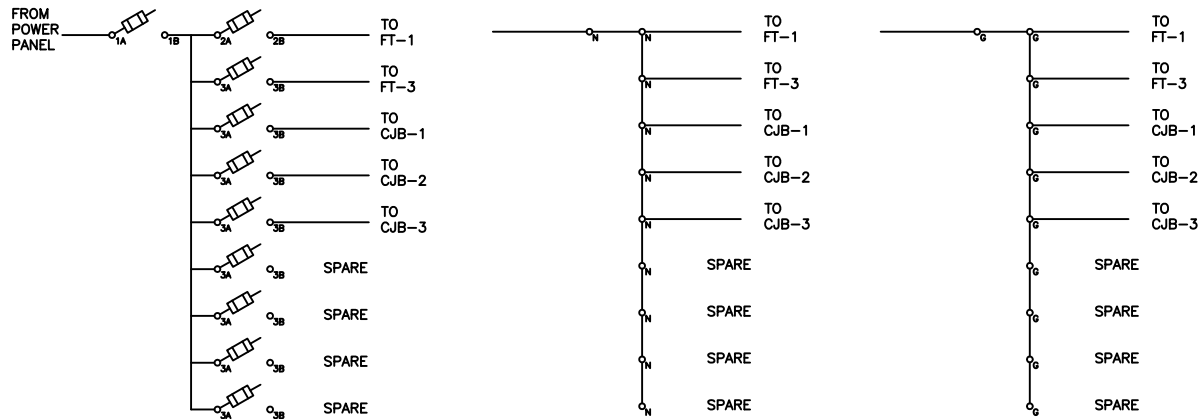
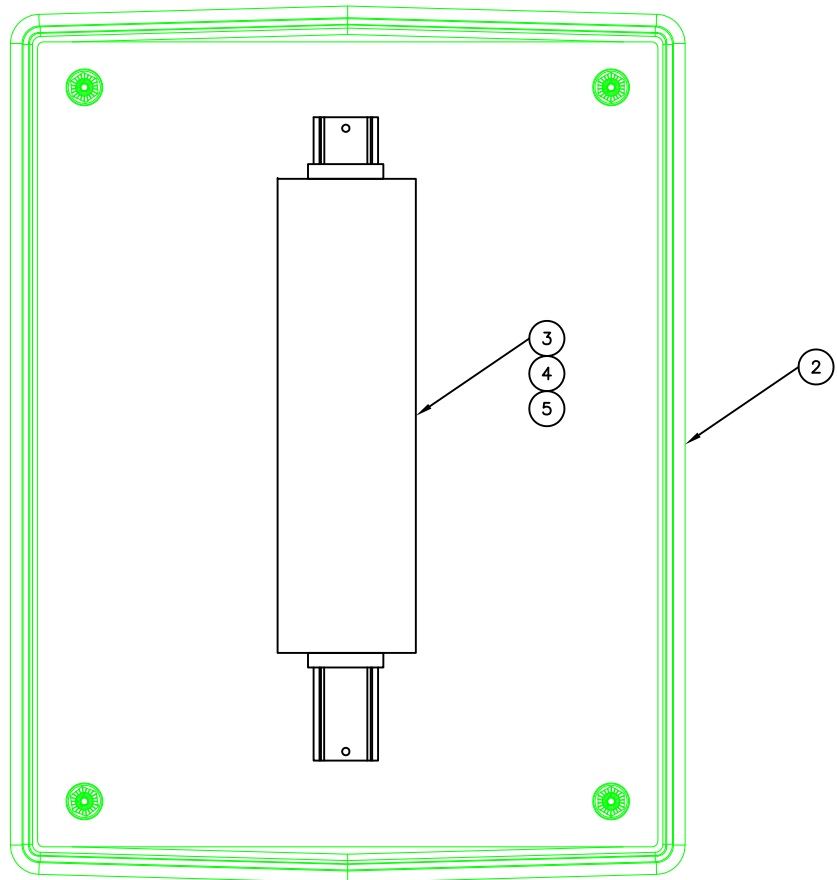
RICO - ARGENTINE MINE SITE WETLAND DEMONSTRATION	BOX DESIGN PLC PANEL
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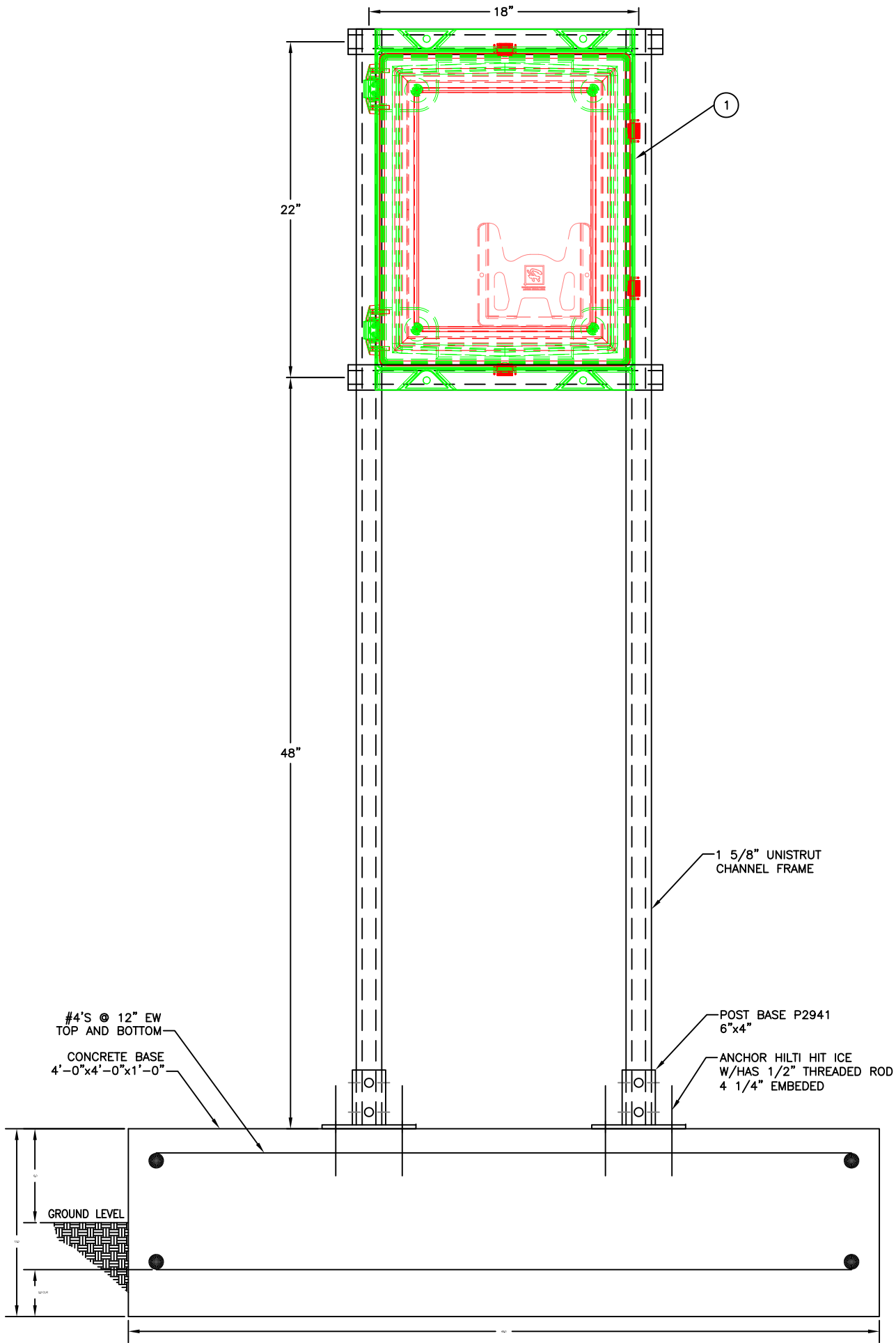
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SHEET:	09 OF 11

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WIRING DIAGRAM

Bill of Materials				
Item #	Qty	Description	Manufacture	Catalog #
1	1	Enclosure 20.19x16.25x6, NEMA 4x	Hoffman	A20H1606GQRLP
2	1	Panel (for item 1)	Hoffman	A20P16
3	AR	Terminal Block	---	---
4	AR	Fused Terminal Block	---	---
5	AR	Din Rail, 35mm	---	---



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APPROVED: BRW
JOB No: 1314
CAD FILE: E10.dwg

REV	DATE	DESCRIPTION

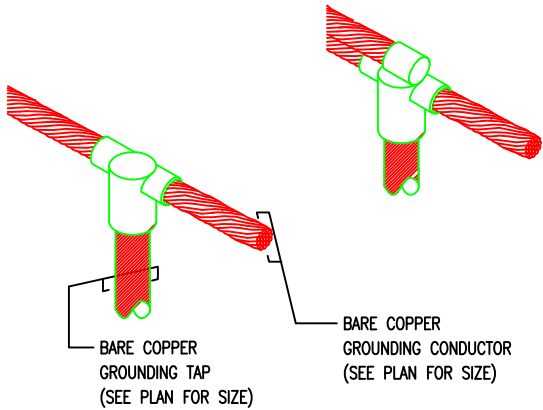
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BOX DESIGN
CJB-2 & CJB-3

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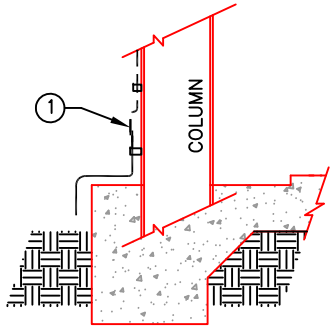
E10

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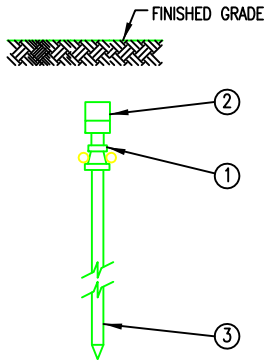
DETAIL
EXOTHERMIC WELDED TEE

1
E3



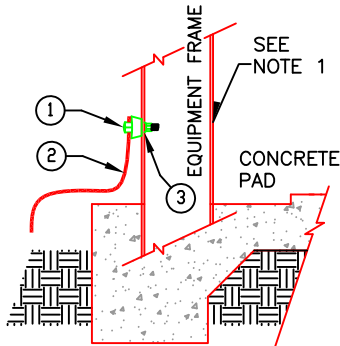
DETAIL
COLUMN GROUNDING

2
E3



DETAIL
GROUND ROD CADWELDED DETAIL

3
E3



DETAIL
EQUIPMENT FRAME GROUNDING DETAIL

4
E3

- NOTES:
1. CONTRACTOR IS TO DRILL HOLE IN THE EQUIPMENT FRAME OR SUPPORT LEG AND USE A STAR WASHER THAT COMES WITH THE GROUND CONNECTOR. THE HOLE IS TO BE SIZED ACCORDING TO THE CONNECTOR BEING USED.
 2. THE EQUIPMENT SURFACE MUST BE CLEANED TO BARE METAL AND THE CROUSE-HINDS TYPE STL (OR EQUAL) CONDUCTING GREASE APPLIED PRIOR TO THE LUG ATTACHMENT.

BILL OF MATERIAL		
ITEM	DESCRIPTION	QTY
1	EXOTHERMIC WELDED CONNECTION	AR

BILL OF MATERIAL		
ITEM	DESCRIPTION	QTY
1	GROUND ROD COUPLER	AR
2	CADWELD CRUCIBLE	AR
3	10' COPPER GROUND ROD	AR

BILL OF MATERIAL		
ITEM	DESCRIPTION	QTY
1	BURNDY TYPE QGFL BARTAP GROUND CONNECTOR	AR
2	GROUND CONDUCTOR	AR
3	STAR WASHER	AR

DRAWN BY:	DML
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JOB No:	1314
CAD FILE:	E11.dwg

REV	DATE	DESCRIPTION

RICO - ARGENTINE MINE SITE
WETLAND DEMONSTRATION

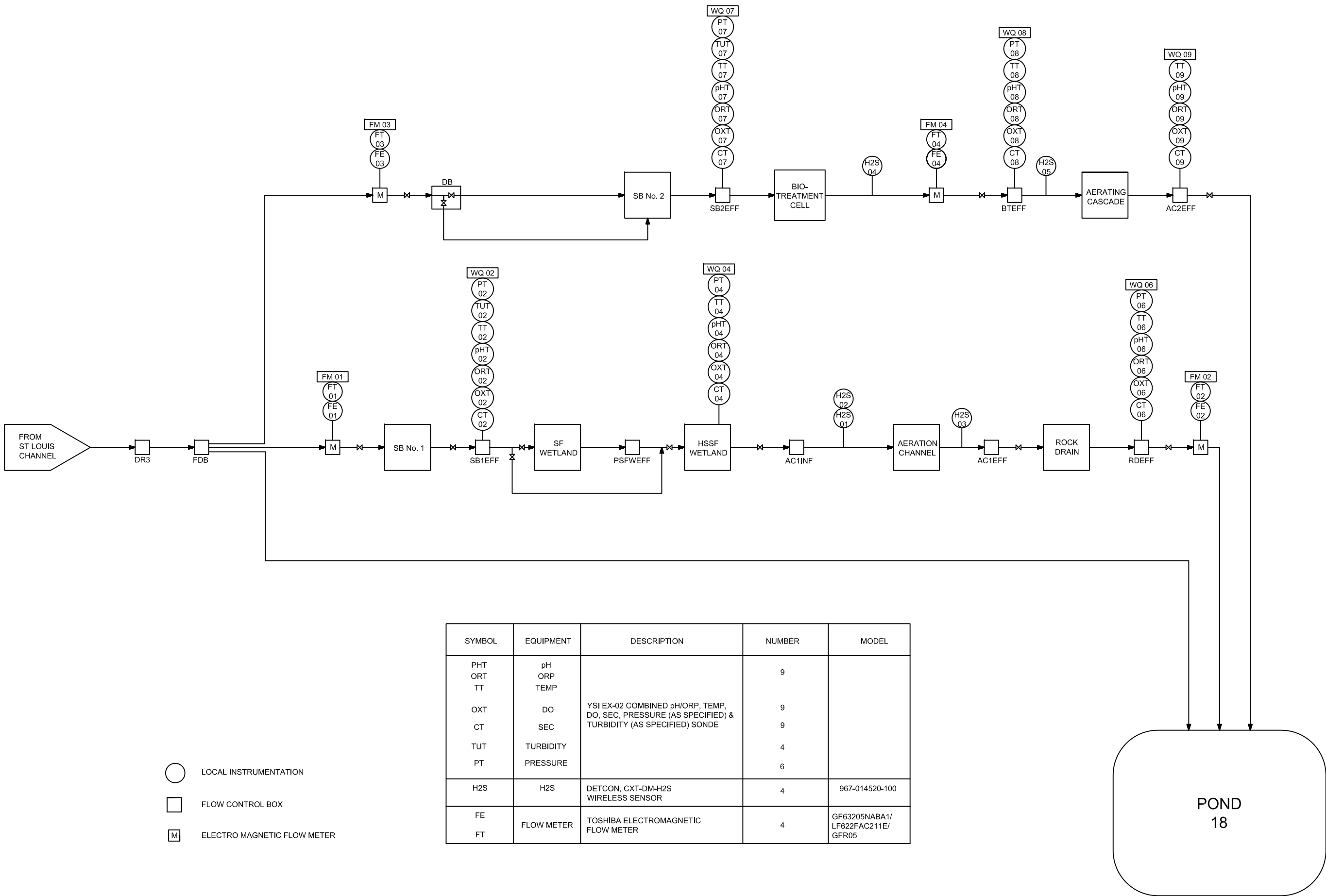
GROUNDING DETAILS

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SHEET:	11 OF 11

E11

\\WUT\Projects\1314-Rico Mine.sit\2014 Engineering Support\7. Technical\Telenet\Desk\11.dwg



- LOCAL INSTRUMENTATION
- FLOW CONTROL BOX
- ELECTRO MAGNETIC FLOW METER

SYMBOL	EQUIPMENT	DESCRIPTION	NUMBER	MODEL
PHT ORT TT	pH ORP TEMP	YSI EX-02 COMBINED pH/ORP, TEMP, DO, SEC, PRESSURE (AS SPECIFIED) & TURBIDITY (AS SPECIFIED) SONDE	9	
OXT	DO		9	
CT	SEC		9	
TUT	TURBIDITY		4	
PT	PRESSURE		6	
H2S	H2S	DETCO, CXT-DM-H2S WIRELESS SENSOR	4	967-014520-100
FE FT	FLOW METER	TOSHIBA ELECTROMAGNETIC FLOW METER	4	GF63205NABA1/LF622FAC211E/GFR05

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APPROVED: BRW
JOB No: 1314
CAD FILE: l1.dwg

REV	DATE	DESCRIPTION

RICO - ARGENTINE MINE SITE
WETLAND DEMONSTRATION

PROCESS AND
INSTRUMENTATION
DIAGRAM

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11